FORM MR-1
(Revised May 1982)

RECEIVED
APR 15 1983
DIVISION OF
OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES AND ENERGY
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, Utah 84114
Telephone: (801) 533-5771

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS and MINING AND RECLAMATION PLAN

Based on Provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, General Rules and Regulations and Rules of Practice and Procedures, By Order of the Board of Oil, Gas and Mining.

Mine Name: Remond Bentonite Pit Mine Plan Date: _____

File No.: ACT/041/012 Date Received: _____

Operator: Western Clay Company DOGM Lead Reviewer: _____

Mineral(s) to be Mined: _____

Please attach other sheets as needed and include cross-reference page numbers when used.

1. Name of Applicant or Company: Western Clay Compnay
   Corporation (X) Partnership ( ) Individual ( )

2. Address: Permanent: P.O. Box 1067
   Aurora, UT 84620
   Temporary: _____

3. Company Representative: Name: T.E. Robison
   Title: General Manager
   Address: 655 MT. VIEW DR. Richfield, UT 84701 Phone: 801-896-6693

4. Location of Operation: County(ies) Sevier
   Township(s): 21S 2/S Range(s): 1/W Section(s): 2
   Township(s): _____ Range(s): _____ Section(s): _____
   Township(s): _____ Range(s): _____ Section(s): _____

5. Owner(s) of record of the surface area within the land to be affected:

Name: Utah Division of State Lands Address: _____
Name: _____ Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

6. Owner(s) of record of the minerals to be mined:

Name: Utah Division of State Lands Address: _____
Name: _____ Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

7. Owner(s) of record of all other minerals, including oil and gas, within any part of the land to be affected:

Name: N/A Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

8. Have the above owners been notified in writing? ( ) Yes, ( ) No. If no, why not? N/A

9. Have you or any other person, partnership or corporation associated with you received an approval of a Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein? ( ) Yes, (X) No. If yes, list all approval numbers now under surety:

10. Source of Operator's legal right to enter and conduct operations on the land to be covered by this Notice:

Utah State Mineral Lease # ML1937

11. Give the names and mailing addresses of every principal Executive, Office, Partner (or person performing a similar function) of Applicant:

	Name	Title	Address
A.	Neal J. Mortensen	President	P.O. Box 1067, Aurora, UT 84620
B.	M. Ken Johnson	Vice Pres.	Same as Above
C.	Thomas E. Robison	Secretary, General Manager	Same As Above
D.			

12. Has the Applicant, any subsidiary or affiliate or any person, partnership, association, trust or corporation controlled by or under common control with the Applicant, or any person required to be identified by Item 11 ever had an approval of a Notice of Intention to Mine or Explore withdrawn or has surety relating thereto ever been forfeited? ( ) Yes, (X) No.

If yes, please explain: _____

_____

_____

_____

_____

_____

Please note: Section 40-8-13 of the Act provides that information relating to the location, size or nature of the deposit, and marked confidential by the Operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the Operator, or until the mining operation has been terminated as provided in Subsection (2) of Section 40-8-21 of the Act. This material should be so marked and included on separate cross-referenced sheets.

13. All maps and plans prepared for submission shall be of adequate scale and detail to show topographic features and clearly indicate the following details:

A. Location and delineation of the extent of the land previously affected, as well as the proposed surface disturbance. see map P3A
B. Existing active or inactive, underground or surface mined areas. See Map P3A
C. Boundaries of surface properties, including ownership. All areas are property of the State of Utah.
D. Names and locations of:
   (1) Lakes, rivers, streams, creeks and springs. None
   (2) Roads, highways and buildings. County roads No. 25631 & 25637
   (3) Active or abandoned facilities. N/A
   (4) Transmission lines within 500 feet of the exterior limits of land affected. None
   (5) Gas and/or oil pipelines. None
   (6) Site elevation. 5200-5300
E. Drainage patterns of land affected: See map P3B
   (1) Overburden or topsoil removal and storage areas. See map P3B
   (2) Areas susceptible to erosion. None
   (3) Natural waterways. None
   (4) Constructed drainages, diversions, berms and sediment ponds (design calculations shall be included). None
   (5) Receiving waters (State Health classification). N/A
   (6) Directional flow of all surface waters (indicated by arrows).
F. Known drill holes: N/A
   (1) Location.
   (2) Status.

(3) Depths and thicknesses of:*
   a. Water bearing strata. N/A
   b. Mineral deposits. 50' or more
   c. Toxic or potentially toxic materials. N/A
   d. Surficial or plant supporting material (topsoil and subsoil). Varies from 0" to 18" Averages approx 8".

G. Locations of disposal and stockpile areas:
   (1) Topsoil and subsoil storage areas. See map P3B
   (2) Overburden storage area. None
   (3) Waste, tailings, rejected materials. None
   (4) Raw ore stockpile(s). See map P3B
   (5) Tailings-ponds and other sediment control structures. None
   (6) Discharge points, water effluents (see #15[D]).

All maps should have a color code or other suitable legend used in preparation to clearly indicate surface features of the land affected. A general reference map completed on a 7.5 (1:24,000) USGS quadrangle sheet is recommended with additional large scale maps included for practical delineation of individual facilites, (e.g., 1:200, 1:500).

14. Acreage to be disturbed:

A. Minesite (operating, storage, disposal areas, etc.): 3 to 5 acres
B. Access/haul roads/conveyors: 0.1 acres
C. Associated on-site processing facilities: Possible on site Portable screening Plant .5 acres.

15. Describe mining method to be employed, including:

A. Mining sequence:
   (1) Map delineating the yearly sequential disturbance (if surface mine) and/or surficial disturbance. See map P4A & Narrative P4B
   (2) Narrative (including on-site processing or mineral treatment):
   An area of approximately 3 acres will be stripped of topsoil. The topsoil will be stockpiled and stabilized with vegetation. The exposed bentonite will be ripped and then disced during the summer months to allow it to air dry. The dried layer of bentonite will then be removed to an adjacent stockpile and the discing - drying process repeated. Some screening of dried stockpiled material may be done on site from time to time with a portable screening plant.
   Attach supplemental sheets and/or diagrams as necessary with cross reference to page number here: P4A.

*Stratigraphic or lithologic logs if correlated to footage depths may be presented when labeled (maps or logs should be labeled confidential, if so desired).

B. If sedimentary deposit seam(s):
(1) Thickness(es): Varies from 5' to over 100'
(2) Dip: The bedding in the area is so disturbed that a dip trend cannot be defined beyond an extremely small area
(3) Outcrop: Bentonite outcrops throughout lease area ///

C. Will any underground workings or aquifers be encountered? ( ) Yes, (XX) No. If yes, describe potential impacts and protection measures to be taken: _____

D. Describe any active discharge or proposed discharge of water from mine or site area. Include water quality data and lab test reports. If attached sheets or reports are included, cross reference to page number here: Page 5A .

16. Have all necessary water rights been appropriated? ( ) Yes, (XX) No. How will water be obtained? Please explain: No water is necessary

17. Proposed or estimated duration of mining operation: 25 years
Will the permit term be for a lesser amount of time, subject to review? (e.g., for surety estimate reasons). ( ) Yes, (XX) No. If yes, how long? _____

18. Describe the construction and maintenance of access roads including:
A. Procedures (drainage and erosion control methods).
B. Cross section(s).
C. Profile(s) of proposed road grade(s).

A. Approximately 200 yards of pre-existing road is all that is involved. This roadway is simply a bladed off pathway to the deposit. No drainage or erosion control is necessary.
B. No cross section is presented due to the shortness and minimal use of the road.
C. No profile is presented for the above reasons.
See Map P4-A

Attach supplemental diagrams and cross reference to page number here: _____.

19. Prior land use(s): Extremely limited grazing.
Current land use(s): Bentonite mine
Possible projected or prospective future land use(s): Extremely limited grazing

Bentonite Clay is nearly impermeable to water percolation. As a result any precipitation falling on the area is collected in the low spots. One pit which is presently being mined is the collecting basin for quite a large area.

Prior to mining this pit in the spring time, the collected water must be pumped out and the pit floor allowed to dry out. This entails the pumping of approximately 10 to 20 thousand gallons of water. The water is pumped with a small gasoline powered pump through a 2" discharge hose. The water discharged simply follows the natural drainage to the west usually soaking into the ground. Occasionally the water will reach a nearby farm where it is used for irrigation by the farmer.

This entire pumping process rarely exceeds 24 hours total pumping time in any year.

A water sample is being sent for analysis and the results will be forwarded to the Division of Oil Gas & Mining as soon as it is received.

20. Describe methods of tree and brush removal: The minimal amount of vegetative cover is simply pushed off by the stripping bulldozer.

Provide estimate of, and method of obtaining existing vegetation cover (%): See chart P6A Estimate prepared by local SCS Range conservationist.

What types of dominant vegetation are present? See P6A

Photographs and/or maps may be attached to these forms, cross reference to page number here: _____.

21. Soils (surficial plant supportive material) and overburden: Except where slope or rocky terrain make it impossible, all surficial materials suitable as a growth medium shall be removed, segregated and stockpiled according to its ability to support vegetation (as determined by soil analysis and/or practial revegetation experience) prior to any major excavation. (Suggested minimum requirements are the top six inches, or the "A" horizon, whichever is larger.)

A. What is the pH range of the soil before mining? 8.3 to ~~8.6~~ 9.1
Name of person or agency and method of determining pH: U.S. Soil Conservation Service records of soil types nearest to mine area.
Attach lab report if available. Cross reference page number here: P6C & D.

B. Average depth of topsoil and subsoil to be stripped and stockpiled: 8". Calculated volume of soil to be stockpiled: 2,700 yd^3.

C. Describe the method for removing and stockpiling topsoil and subsoil, including measures to protect topsoil from wind and water erosion, compaction and pollutants: Where it exists. Top & subsoil will be pushed off the bentonite and stockpiled. The stockpiles will be flattened on top and seeded with a mixture of crested wheatgrass, pubescent wheatgrass yellow sweet clover and ranger alfalfa to minimize erosion.

D. Describe the method for removing and stockpiling overburden.
Describe and discuss the acidity or alkalinity (pH) or other characteristics which would affect revegetation: No overburden will be encountered. The minimal amount of soil in the area lays directly on top of the clay beds.

P. 6-A

UT-ECOL SCI-2
(Rev. 3/83)
File: 190-19

RANGE CONDITION RECORD

USDA
Soil Conservation Service
Write-up No. 1

(8" annual ppt.)

Site Name Badlands B-1 Ranch Western Clay Company
Soil Taxonomic Unit Badlands Profile No. 1
Elevation 5250 ft. Exposure NW Vegetative Aspect —
Field Office Richfield Location: T. 21S R. 1W Sec. 2 1/4 NW 1/4 SW
Range Conservationist: V. Smith Date: 4-2-83

(1) Plant Group	(2) Symbol or Common Plant Names	(3) % Present by wt.	(4) % Climax by wt.	(5) Proper use factor	(6) Weighted PUF
Grasses and Grass-like Plants	Indian Ricegrass	5			
	Sand Dropseed	20			
	Bromus tectorum	50			
	Stipa comata	1			
	Muhly spp.	T			
	Saltgrass	1			
% 77					
Forbs or Weeds	Halogeton	T			
	Allium spp	T			
% T					
Trees and Shrubs	Greasewood	1			
	Shadscale	20			
	Horsebrush	T			
	Snakeweed	2			
% 23					
	TOTAL	100%			

Total Annual Yield 300 lbs/Ac. air-dry
(Understory if woodland)

CONDITION CLASS INDICATORS:

Evaluate each indicator in relation to climax for the site. (Circle those that apply).

% Climax Vegetation	Accelerated Erosion	Population Density	% Plant Diversity	Condition Rating
100-76	None	3/4 to full	100-76	Excellent (Climax)
75-51	Slightly Active	1/2 to 3/4	75-51	Good (Late seral)
50-26	Moderately Active	1/4 to 1/2	50-26	Fair (Mid seral)
25-0	Severely Active	0 to 1/4	25-0	Poor (Early seral)

TREND INDICATORS:

Plant Vigor: poor
Seedlings and young plants: poor
Litter and mulch: very little
Condition of soil surface: Slightly eroded.
Apparent Trend: Improving Declining Static

EROSION COMPUTATION DATA

Bare Ground 73 %
Surface Fragments 12 % = 100%
Ground Cover 15 %
(Litter and vegetation within 1 inch of soil surface)

Height of canopy: 0 0.5m 2m 4m
Canopy Cover: 0 25% 50% 75%
Slope 6-8 % Slope Length 200 ft.

R ____ K ____ LS ____ C ____ T ____

Wind Erosion Data: Climate ____ Soil WEG ____
Unsheltered distance ____ Veg. Cover ____

Soil Loss (sheet and rill) ____ tons/acre/year
Soil Loss (gully erosion) ____ tons/acre/year
Soil Loss (wind) ____ tons/acre/year

USE DATA

Use History: Overgrazed
Kind of Animal: Sheep
Season of Use: Spring
Burning History: None.

Present Utilization 0 % of ____ (key species)
Estimated Utilization Efficiency: 0 %

Notes:

Plot #	Bare ground	Fragments	G.C.
1.	70%	20%	10%
2.	75%	5%	20%
3.	75%	10%	15%
4.	75%	5%	20%
5.	70%	20%	10%
Ave.	73%	12%	15%

UT-RANGE-2
Rev. 10/82

INSTRUCTIONS
Range Condition Record

Column 1 - Show % of total annual yield for each group of plants.
Column 2 - List common names or plant symbols from List of Scientific and Common Plant Names for Utah.
Column 3 - Show % by air-dry weight of the total annual yield that each plant presently comprises.
Column 4 - List % of species shown in the site description or the % in Column 3, which ever is less. (See Standards)
Column 5 - Show the % that each species should be used to achieve proper grazing use of the plant community. and Specifications for Proper Grazing Use-528.)
Column 6 - Weighted PUF (Proper Use Factor) = Column 3 x Column 5. The total of this column is the weighted PUF for the present plant community.

CONDITION CLASS INDICATORS

% Climax Vegetation - Circle the block where the total of Column 4 occurs.
Accelerated Erosion - Show current erosion as related to climax condition.
Population Density - Show current density (number of plants per unit area) as related to density in climax condition.
% Plant Diversity - Show the % of plants that make up 3% or more of the climax plant community that still occur in the present plant community.
Condition Rating - Circle the block which gives the final ecological condition rating based upon consideration of all 4 condition class indicators.

TREND INDICATORS

List conditions observed for each of the 4 trend indicators listed, as applicable.

Apparent Trend - Circle "Improving", "Declining", or "Static" as determined based upon consideration of all 4 trend indicators (See National Range Handbook, Section 307).

EROSION COMPUTATION DATA

List % of bare ground, surface fragments, and ground cover (litter and vegetation within 1 inch of, or in contact with the soil surface). These should total 100%.

Height of Canopy - Circle the height that best represents the average fall height of waterdrops falling from the canopy to the ground. m = meters.
Canopy Cover - Circle the % that best represents the portion of the ground surface that would be hidden from view by canopy in a vertical projection.
Slope - Record the % slope of the area represented by this write-up.
Length of Slope - Record the length of slope in feet for the area represented by this write-up, as defined in the Universal Soil Loss Equation booklet for Utah.
For USLE factors and definitions, use the Universal Soil Loss Equation booklet for Utah.
For Wind Erosion Data insert values as defined in Utah Guide for Wind Erosion Control.

USE DATA

Use History - Show past grazing history of the area: none, slight, moderate, heavy, severe.
Kind of Animal - Enter codes to indicate kinds of grazing animals: A = antelope, B = bison, E = elk, G = goats, H = horses and mules, S = sheep, or list others.
Season of Use - Show the season or seasons when the area is grazed: (-) = unknown, 1 = spring, 2 = summer, 3 = fall, 4 = winter, 5 = specialized grazing system, 0 = not grazed.
Burning History - (-) = unknown; 1 = rarely, if ever, burned; 2 = occasionally burned; 3 = systematically burned.
Present Utilization - Show current % utilization of key species where the write-up is made and list the species used to judge utilization.
Estimated Utilization Efficiency - Show the % of usable forage that is actually being (or will be) utilized. Steepness of slope, size of pasture, kind of animal, intensity of management, distance from water and salt, etc. are factors that affect utilization efficiency.

PAGE 6 - C

SMD2

Soil type

Soil type Sanpete gravelly loam (SMD2	**Date** 9-28-70	**Stop No.** P.172	
Classification Xerollic Calciorthid	**Area** L.P.R. IFF-125 C-1		
Location 5½ mi. W. Salina, 1 mi. SW. NW¼ sec. 23, T21S, R2W		**Elev.**	
N. veg. (or crop) Shadscale-Sagebrush-Blacksage-Indian rice grass	**Climate** Sand dropseed, scattered juniper		
Parent material Sandstone-Limestone			
Physiography Rolling hills			
Relief	**Drainage** Somewhat excessively	**Salt or alkali**	
Elevation 6080	**Gr. water**	**Stoniness**	
Slope 4%	**Moisture**		
Aspect S	**Root distrib.**		
Erosion			
Permeability Moderate rapid			
Additional notes C2ca strongly Cemented			
loamy Skeletal Carbonatic mesic			

File No.

SCS-232A-Soil Description—Rev. 7-15-56

Horizon	Depth	Color Dry	Roots	Color Moist	Pores	Texture	Structure	Consistence Dry	Consistence Moist	Consistence Wet	Reaction	Lime	Boundary
A11	0-8	10YR6/3	cf vf	10YR4/3	cf m	15-20% gl	1f gr	s	fr	ss ps	8.5	es	ca
A1ca	8-12	7.5YR7/4	ff	7.5YR6/4	ff	15% l	1f abk	sh	fr	ss ps	8.5	es	ca
2Cca	12-23	7.5YR8/2	ff	7.5YR7/4	inst.	10% l	m	strongly cemented	fr	ss ps	8.5	ev	gw
3Ca	23-29	5YR7/3	ff	5YR6/4	inst.	50 60% vg-l	sg	h	fr	ss ps	8.4	ev	gw
4	29-48	5YR7/4	ff	5YR6/6	inst	Co 70% vg sl	sg	sh	vfr	so ps	8.4	es	gw
5	48-60	5YR7/3	—	5YR6/4	cf	l	m	h	fr	ss ps	8.4	ev	—

PAGE 6-10

SMD2

Soil type Sandy gravelly loam		Date 6/21/71	Stop No.
Classification		Area Richfield	
Location Valley farms IFF-158			Elev.
N. veg. (or crop)		Climate	
Parent material			
Physiography			
Relief	Drainage		Salt or alkali
Elevation	Gr. water		Stoniness
Slope	Moisture		
Aspect	Root distrib.		
Erosion			
Permeability			
Additional notes			

Soil type

File No.

SCS-232A-Soil Description—Rev. 7–15–56

Horizon	Depth	Color		Texture	Structure	Consistence			Reaction	Boundary
		Dry	Moist			Dry	Moist	Wet		
Ap	0-9	10YR6/2	10YR4/3	30% gr gl-		h	fr	ss-ps	8.3	
C1ca	9-28	10YR 7/3	10YR5/3	40% gr gsl		sh	fr	ss-po	8.4	
C2	28-36	10YR 7/3	10YR5/3	50-60% gr vgsl		sh	fr	ss-po	8.6	
C3	36-48	10YR 7/3	10YR6/3	40% gr gsl		sh	vfr	so-po	8.6	

E. Rock subjected to processing such as waste rock, tailings, etc., and which is to be disposed of on- or off-site must be subjected to a toxicity analysis. The method of determination, results and suitable disposal methods must be explained in detail, including means for containment and long range stability*: No processed material will be diposed of at the site.

22. Describe the methods used to minimize public safety and welfare hazards during and after mining operations including:

A. Shaft, tunnel and drill hole closure.
B. Disposal of trash, scrap metal and wood and extraneous debris, waste oil and solvents, unusable buildings and foundations, sewage and other materials incident to mining.
C. Posting of appropriate warning signs and/or fences or berms to act as barriers (e.g., above highwalls) in locations where public access is available.

A. N/A
B. Trash & debris will be disposed of at the nearby Redmond waste disposal area.
C. Any highwalls actually made by Western Clay Compnay during our present operations will be either fenced of berms will be constructed to provide public protection.

*"Toxic" means any chemical or biological or adverse characteristic of the material involved which could reasonably be expected to negatively affect ecological or hydrological systems or could be hazardous to the public safety and welfare.

23. Grading and soil redistribution.

A. Attach pre- and postmining contour cross sections, typical of regrading designs. Cross reference to page number here: P 8A-B-C .

B. Describe the method(s) of overburden replacement and stabilization and highwall elimination, including: (a) slope factors; (b) lift heights; (c) compaction; (d) terracing, etc., (e) also include testing procedures: No overburden replacement is anticipated.
A. Where it is feasible to do so, highwalls will be eliminated by bulldozing the crest off to the natural angle of repose or a 1 to 1 slope whichever is less.
B-C. Control of lift heights and compaction is not expected to be necessary.
D. Terracing will be employed where feasible on highwalls which cannot be eliminated by the method outlined in (A) above.
E. Testing is not anticipated to be necessary.

C. What method of spreading topsoil and subsoil or upper horizon material on the regraded area will be employed?
A self propelled scraper will redistribute the upper horizon material.

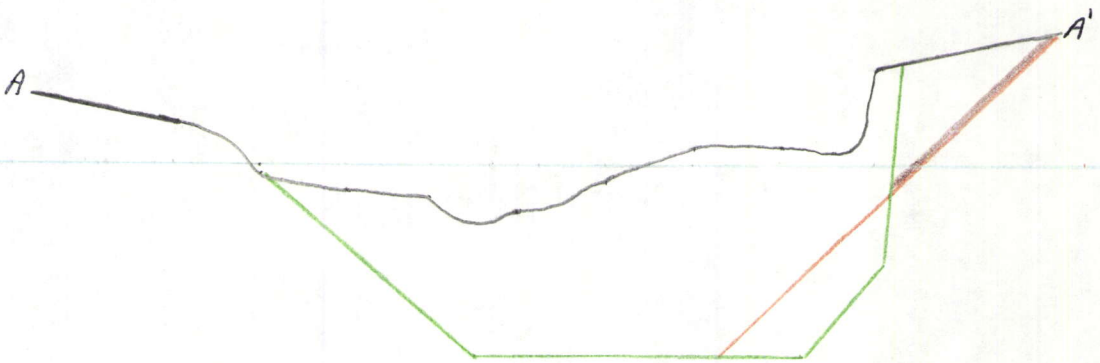
1. Indicate the approximate depth of soil cover after final surfacing 8 inches.
2. What tests will be performed to adequately evaluate the potential of the soil to successfully support intended revegetation? See narrative, page 8-E and map page 8-D.
3. What soil amendments or fertilizers will be needed as an aid to revegetation?
   Type: _____ Rate: _____
   Type: _____ Rate: _____
   Type: _____ Rate: _____
4. What additional surface preparations will be used? Describe (a) drainage, erosion and sediment control measures; (b) maximum slope characteristics; and (c) highwall reclamation.

   A. The area involved is actually quite small and receives minimal precipitation so no erosion or sediment control measures are necessary.
   B. Slopes will be graded to a maximum 1 to 1 where possible.
   C. Highwalls actually made by Western Clay Co. in its present operation will be sloped to a 1 to 1 slope where possible and any remaining highwalls will be either fenced, or protected by adaquate berms.

SECTION A - A' OUTLINER V P 8-A

PAGE 8-B

SCALE 1" = 50'



LEGEND:

PRESENT PIT CROSS SECTION

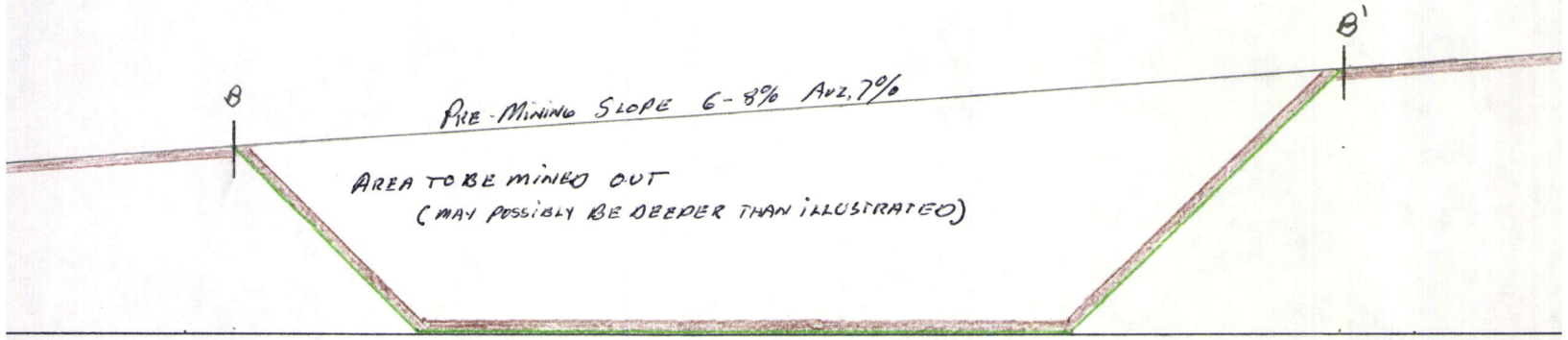
PIT ULTIMATE AND SLOPE

POST MINING RE GRADING

TOPSOIL REPLACEMENT

LEVEL OF PIT ENTRANCE

SECTION B - B' OUTLINED ON P 8-A
SCALE 1" = 50'



LEGEND

PIT ULTIMATE AND SLOPE ———

TOPSOIL REPLACEMENT ———

All the areas to be mined fall within lands classified B-1 or badlands by the U.S. Soil Conservation Service. There are some areas where there is vegetation which will be disturbed. Revegetation will be attempted in these areas. A test plot location will be selected at some previously disturbed area which was abandoned by the previous operator. This plot will be constructed at a site which is mutually agreed upon by Western Clay Co. and D.O.G.M. personnel so as to approximate post mining conditions as nearly as possible. The reason for siting the test plot this way is that none of the active mine areas will have any locations where contemporaneous reclamation will be possible.

5. Describe methods which may be particularly applicable to waste disposal areas determined to be potential problem areas.

No waste disposal problems are anticipated.

D. Describe plans for either leaving or reclaiming the roads and pads associated with the operation.

Roads and pads will be graded. disced and seeded with an approved seed mixture wherever adequate topsoil is available to make this feasible. Other areas will be graded to conform to existing terrain.

24. Impoundments: All evaporation, tailings and sediment ponds; spoil piles, fills, pads and regraded areas shall be self-draining and nonimpounding when abandoned unless previously approved as an impounding facility by a lawful state or federal agency. In view of this, please describe the reclamation of all related areas in the operation and include pertinent items enumerated in C, 1-5 above.

At the time Western Clay Co. took over this property, there were three existing pits which, due to the nature of Bentonite Clay, impound any water that runs into them. No plans are made to remedy these areas. Other areas which may be mined will have to address this problem on a case by case basis.

25. Revegetation plans:

A. What organization, agency or person will specifically be performing the revegetation? Western Clay Co.

B. Will the affected area be subject to livestock or wildlife grazing? ( ) Yes, ( ) No. Will vegetation protection be needed to allow for a determination of the successful revegetation criteria outlined in the Mined Land Reclamation Act, Rule M-10(12)? ( ) Yes, (X) No. If yes, what measures will the operator take?

No livestock enter the area and the only wildlife in the area are jackrabbits, against which fencing is all but impossible.

C. Will irrigation be used? ( ) Yes, (X) No. Type: _____. For how long? _____.

D. Test plots initiated during the early stages of mine development provide good bases from which a successful revegetation program can be adapted for later implementation. Will test plots be employed? (X) Yes, ( ) No. If yes, describe on an additional sheet(s) and attach. Cross reference page number here and show location on facilities map: See Narrative Page 8-E.

E. Please attach a revegetation plan and schedule including:
   1. Species to be used. See page 10-B
   2. Rate of seed application/acre.
   3. Season to be planted.
   4. Seedbed preparation techniques.
   5. Planting location, slope face direction, variability, method of application, covering, etc.
   6. Mulch and fertilizer application, if used.

F. Describe any other maintenance procedures which may be used, if needed, to guarantee successful revegetation:

26. Please provide a reclamation schedule including:

   A. Estimated time for construction.
   B. Estimated time for interim reclamation.
   C. Estimated duration of the mining operation.
   D. A time table for the accomplishment of each major step in the reclamation plans. Attach the schedule and cross reference to the page number here: Page 10C .

27. A surety guarantee must be provided for the mining operation (see Rule M-5 Mined Land Reclamation Act). In calculating this amount, the Division will consider the following major steps based on the information provided in this report:

   A. Clean up and removal of structures.
   B. Backfilling, grading and contouring.
   C. Topsoil and subsoil redistribution and stabilization.
   D. Revegetation (i.e., preparation, seeding, mulching, irrigation).
   E. Labor.
   F. Safety and fencing.
   G. Monitoring, and reseeding if necessary.

   To assist the Division, the operator may attach a list of costs and factors which would satisfy these areas. Substantiation of these factors, i.e., unit costs and how they are derived, should accompany the list. Cross reference the page number here: Page 10D .

28. A request for a variance from specific commitments to Rule M-10 (Reclamation Standards) of the Mined Land Reclamation Act may be submitted with adequate written justification. If after presentation of information adequately detailing the situation, a determination is made that finds a portion of the rule inapplicable, a variance may be granted by the Division.

Revegetation seed mix and appication rate as recommended by local S.C.S Range conservationist.

SPECIES	LBS Pure Live Seed/acre
* Needle & Thread	1
Crested Wheatgrass	3
* Sand Dropseed	2
Yellow Sweet Clover	1
Siberian Wheatgrass	2
* Indian Ricegrass	2
* Shadscale	4
TOTAL	15

* Indicates presently existing species

All planting will be done in the Fall in order to take advantage of Winter precipitation.

After the upper horizon material has been re-distributed, it will be harrowed to prepare a suitable seedbed.

The areas which will be reseeded all are on Northwest slopes.

Seeding will be accomplished with a conventional rangeland drill.

Reclamation Schedule

A. Estimated time for construction
Construction of the mine areas are presently in progress and will continue into the forseeable future.

B. Estimated time for interim reclamation
Interim reclamtion, if any, will most likely begin on active area #1 Identified on page 4-A of this submittal. This reclamation is entirely dependent on the amount of Bentonite in this location. As is noted earlier in this submittal, the extent of mineable clay deposits in any one location is impossible to define accurately, due to the extreme geologic upheaval and resulting complexity of the area.

C. Estimated duration of the mining operation estimated mine life is 20 years.

D. See B above.

A. Cleanup and removal of stuctures.
No structures will be built.

B. Backfilling, grading and contouring
Estimated 24 hrs CAT D-7 @ $65.00hr Labor included. =$1560.00

C. Topsoil and subsoil redistribution and stabilization.
2700 yd^3 topsoil to be redistributed by self propelled scraper @ 20 yd^3/load x 10 loads/hr = 200 yd^3/hr
2700 yd^3 ÷ 200 yd^3/hr = 13.5 hr
13.5 hr x 100.00/hr = $1,350.00 labor included

D. Revegetation

4 acres to be reseeded x 60.00/acre seed mix cost = $240.00
Reseeding 4 acres 2 hours equipment time at 40.00/hr = $80.00

E. Labor
Estimated 10 man hours @ $ 8.00/hr = $80.00

F. Safety & Fencing
Contructing safety berms on highwalls
4 hours CAT D-7 @ $65.00/hr =$260.00
Fencing including labor Estimated at $250.00

G. Monitoring and reseeding if necessary

1 man day/year @ $50.00/day for 5 years $250.00

I hereby commit the applicant to comply with Rule M-10, "Reclamation Standards" in its entirety, as adopted by the Board of Oil, Gas and Mining on March 22, 1978.

The applicant will achieve the reclamation standards for the following categories as outlined in Rule M-10 on all areas of land affected by this mine, unless a variance is granted in writing by the Division.

Rule	Category of Commitment	Variance Requested?
M-10(1)	Land Use	
M-10(2)	Public Safety and Welfare	
M-10(3)	Impoundments	
M-10(4)	Slopes	
M-10(5)	Highwalls	
M-10(6)	Toxic Materials	
M-10(7)	Roads and Pads	
M-10(8)	Drainages	
M-10(9)	Structures and Equipment	
M-10(10)	Shafts and Portals	
M-10(11)	Sediment Control	
M-10(12)	Revegetation	
M-10(13)	Dams	
M-10(14)	Soils	

I believe a variance is justified on a site-specific basis for the previous subsections of Rule M-10 as indicated. A narrative statement explaining these concerns is attached.

STATE OF UTAH

COUNTY OF SEVIER

I, THOMAS E. ROBISON, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: [signature]

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 12 day of April, 1983.

Notary Public: Lyn D. Robins

My Commission Expires: May 01, 1984

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps.

Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: ( ) Yes ( ) No